Dräger medical

A Dräger and Siemens Company

Supplement

to the

Saturn Setup and Installation Manual

(Version 4.x)

"Workstation Installation and Configuration"

(Section 10)

(for EG Hardware) (Rev. -)

(Windows Updates to Install) (Rev. A)

Supplement 4118155, Rev. A

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1 PURPOSE

This procedure provides instructions to install a Saturn Workstation system. The operator must have a basic understanding of Windows NT/2000.

2 SOFTWARE REQUIREMENTS

PART	DESCRIPTION
4118144	CD-Windows 2k Base Files
4117665	CD – Install Workstation - Saturn 4.10

3 RELATED DOCUMENTS

Chapter	DESCRIPTION
7	Server Installation Procedure

4 ACRONYMS

ACRONYMS	DESCRIPTION
DD	Destination (Designated) Drive
ISU	Installation and Setup Utility Script
LAN	Local Area Network
NAD	North American Drager
TD	Target Directory Location
WD	Working Directory
WPU	Workstation Processing Unit
NCPU	Non-clinical Processing Unit
AOPU	All-in-one Processing Unit

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5 DEFINITIONS

DEFINITION	DESCRIPTION
Click	When using a mouse, press the left mouse button.
When using a Touch Screen, touch the item on the screen. After the item is selected, press and hold the shift key, then press F10.
Designated Drive (DD)	Drive to which the install is being done. Will be the C: drive in most cases – unless otherwise designated.
Double-click	When using a mouse, rapidly press the left mouse button twice.
When using a Touch Screen, rapidly touch the screen twice.
File	The contents of a folder
Folder Tree/Directory Tree	Directory Tree – graphic representation of folders and sub-folders
Panel	When a screen is divided into two sections – left and right.
Right-click	When using a mouse, press the right mouse button.
When using a Touch Screen, touch the item on the screen.
Sub-folder	A sub-level within a folder
Workstation Processing Unit	Dräger-supplied PC used in clinical OR environments
3rd Party Clinical	3rd party PC (Dell, Compaq, etc…) used as a WPU
Non-clinical Processing Unit	3rd party PC (Dell, Compaq, etc…) used in non-OR environments
All-in-one Processing Unit	Advantech POC 153 brand unit with processor and monitor in one housing unit

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6   PREREQUISITES

Before the workstation installation procedure is performed, the Saturn Server Installation Instructions must have been completed and the following **site-specific information** must be obtained:

IP addresses (including WINS, DNS information)
Server UNC name
Sybase Server Name
Sybase DB Name
Workstation computer names
Saturn domain user name(s) and password(s)
Domain name
Local administrator names and passwords
Domain administrator (or other account) names and passwords – used to add workstations to domain
A source for installing software – either a CDROM that is shared or a network share
Printers/print drivers
CCOW Information:
1.   The site's Context Manager will require the application name and application pass code for Saturn prior to configuring the system

2.   The location of the Desktop Components Install CD on the client's network

3.   The site specific CCOW Application Key Name

4.   The Virtual IP\Network Name of Sentillion's Network Appliance used during desktop components install

The above is **site-specific information** and should be available from Dräger Service prior to new installations and upgrades.

Make certain that the source locations for all software installations is available. The following installation CD's need to be either in a CD-ROM drive on-site with the drive shared and accessible or the files have been copied to a share on a computer (typically the Saturn server) on-site:

Saturn Workstation Installation CD
NT SP6a 128-bit (for Windows NT only)
PCAnywhere CDs versions 10.0 and 10.5
Internet Explorer CD version 5.5
CCOW Component Installation CD
Win2k Basefiles CD

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7   INSTALL NEW VERSIONS ON WINDOWS NT

7.1   *Configure Network Properties*

1.   Select **Enter** to close the "At least one service or driver failed during system startup…' message.

2.   Select **Start**->**Settings**->**Control Panel** from the task bar. Select **Network**.

3.   Select the **Change** button.

4.   Change the "**Computer Name:**" field to desired name (site-specific information).

5.   Record this value.

6.   Select the **OK** button.

7.   Verify that the Computer Name is correct.

8.   Select the "**Protocols**" tab.

9.   Select "**Netbeui**" and **REMOVE**

10.   Select "**TCP/IP Protocol**"

11.   Select the "**Properties…**" button.

12.   If using static IP addressing, execute the following steps:

   Ensure that the "**Specify an IP address**" radio button is selected.
   Enter the desired "IP Address", Subnet Mask", and optional "Default Gateway" data (site specific information). Record these values.

   EXAMPLE DATA:
   IP Address: 10.0.0.100
   Subnet Mask: 255.0.0.0
   Gateway: 10.0.0.1

   Enter any WINS or DNS information in the appropriate tabs.

13.   If using DHCP or dynamic addressing, select the **"Obtain an IP address from a DHCP server"** radio button.

14.   Once all appropriate IP addressing information has been entered, select the **OK** button on the **TCP/IP Properties** window.

15.   Select the **Close** button to close the Network Properties window

16.   Select **Yes** to restart the computer

17.   Select **Enter** to close the "At least one service or driver failed during system startup…" message.

18.   Following system reboot, select **Start**->**Settings**->**Control Panel** from the task bar.

19.   Select **Network**.

20.   Select the "**Identification**" tab.

21.   Select the **Change** button.

22.   Select the **Domain** radio button.

23.   Enter the desired domain name (e.g. "SATMAN" – site specific information). Record this value.

24.   NOTE: Steps 24 and 25 may not be required at all sites.

25.   Select the "**Create a Computer Account in the Domain**" checkbox.

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26. Enter an administrative user name and password with rights to add machines to the domain (site specific information).

27. Ensure the "Welcome to the SATMAN (site specific) Domain" message appears and select **OK**.

28. Select the **OK** button.

29. Select the **Close** button to close the Dialog.

30. Select the **Yes** button and wait for the workstation to reboot

31. Select **Enter** to close the "At least one service or driver failed during system startup…" message

7.2 *Give User Local Administrator Privileges*

1. Select **Start->Programs->Administrative Tools->User Manager** from the task bar.

2. Select **"Administrators"** in the lower Groups window.

3. Select the **"Add…"** button with Administrator highlighted.

4. Ensure the correct domain is selected after "List names from:"

5. Select the user (e.g. "wpuser" – site specific information) from the Names list.

6. Select the **Add** button.

7. Select any Domain Admins account created for Saturn use (e.g. "satadmin" – site specific information)

8. Select the **Add** button

9. Select the **OK** button.

10. Verify that the user appears in the Members list.

11. Select the **OK** button.

12. Close the **"User Manager"** Dialog.

13. Select **Start->Shutdown** from the task bar. Select the radio button to **Close all programs and log on as a different user**. Then select **Yes while holding down the Shift Key** during log off to disable autologon. Make sure that the shift key remains held down during the entire log off process. At the **Log On** prompt, enter the username and password (from step 5 above) and select the appropriate domain.

14. If the logon is successful, a **"Welcome to Windows NT"** window will be displayed.

15. Select the **Close** button.

7.3 *Set Autolog (WPUs, 3rd Party Clinicals - NCPUs only if a dedicated Saturn workstation)*

1. Explore to **C:\utils\reskit**

2. Select **autolog.exe** to launch the AUTOLOG utility

3. Enter the appropriate password (site-specific information)

4. Select the **OK** button**.**

5. The AUTOLOG ENABLED dialog box will appear – select the **OK button**

6. Select **Start->Shutdown** from the task bar and choose **Close all programs and log on as different user** to test autolog.

7. If autolog was configured properly, the WPU will log on and you will be presented with the NT Welcome window.

8. De-select the **Show this Welcome Screen next time you start Windows NT** checkbox

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    9.   Select the **Close** button

7.4 *Set Time, Time Zone, And Styles*

NOTE: This step configures the Windows NT Time Zone. Both the Server and workstation should be set the same. This is required for the time synchronization to occur

1. Select **Start**->**Settings**->**Control Panel** from the task bar. Select **Date/Time**.
2. Select **Set the time as required**.
3. Select the **Time Zone** tab.
4. Set the time zone as appropriate.
5. De-select **Automatically adjust clock for daylight saving changes,** if necessary.
6. Select **OK** to close **Date/Time** dialog.
7. Select **Start**->**Settings**->**Control Panel** from the task bar. Select **Regional Settings** to set the Time and Date styles.
8. Select **Time** tab and set Time Style to **HH:mm:ss**.
9. Click on the Regional Settings Properties' **Date** tab.
10. Set Short date style to **MM/dd/yyyy**.
11. Select the **Apply** button.
12. Select **OK** to close Regional Settings Dialog.

7.5 *Install the Touchscreen (WPUs and 3rd Party Clinicals ONLY)*

NOTE: If upgrading a 3rd Party Clinical – touch screen is already installed. DO NOT run following steps.

1. Explore to C:\UTILS\ELO (if installing a 3rd party clinical, will need to copy UTILS folder from a WPU or map a network drive to a share on another computer)
2. Execute **SETUP.EXE**
3. At "Welcome" window, select **NEXT**
4. At "Software License Agreement" window, select **YES**
5. At "Choose Destination Location" window, select **BROWSE**
6. At Choose folder window, change path to **C:\utils\EloWinNT**, select OK
7. When prompted to create the folder, select **YES**
8. At "Choose Destination Location" window select **NEXT**
9. At "Monitor Configuration Type" window, select **NEXT**
10. At "Select COM Port" window, select **NEXT**
11. At "Setup Complete" window, select **NO** and **FINISH**
12. Select **Start**->**Run** from the taskbar and enter **Regedit**.
13. Navigate to **HKEY LOCAL MACHINE\SYSTEM\CurrentControlSet\Services\MonMouse\Touchscreen\Parameters**
14. Select the **HARDWAREHANDSHAKING parameter**
15. Change the value data from **1** to **0.**
16. Reboot the workstation
17. Select **Start->Settings->Control Panel** from the task bar. Select Elo Touchscreen.
18. Select the **Sound** tab.
19. Deselect **"Enable Click Sounds"** checkbox.
20. Select **OK**.

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7.6 *Install NT SP6a 128-bit (NCPUs and 3rd Party Clinicals ONLY)*

1. Map a network drive to the installation source (as noted in the Prerequisites section). Verify **Reconnect at Logon** is unchecked.
2. In Explorer, select the mapped drive to see its contents in the right pane.
3. Execute **SP6I386.EXE**
4. Check **ACCEPT LICENSE AGREEMENT**
5. Deselect **BACKUP FILES**
6. Select **INSTALL**
7. Once installation is complete, select **RESTART** to reboot the workstation

7.7 *Install IE 5.5 (NCPUs and 3rd Party Clinicals ONLY)*

1. Map a network drive to the installation source (as noted in the Prerequisites section). Verify Reconnect at Logon is unchecked.
2. In Explorer, select the mapped drive to see its contents in the right pane.
3. Execute **IE5SETUP.EXE**
4. Check **ACCEPT LICENSE AGREEMENT**
5. Select **NEXT**
6. Use default (typical set of components)
7. Select **NEXT**
8. Once installation is complete, select **FINISH** to reboot

7.8 *Install PCAnywhere 10*

WPUs
1. Explore to **C:\UTILS\PCA10**
2. Execute **HOSTLAN.EXE** to launch the install
3. Proceed with step A below:

NCPUs and 3rd Party Clinicals
NOTE: DO NOT uninstall previous versions of PCAnywhere using the ADD\REMOVE PROGRAMS function in Control Panel prior to running the PCAnywhere version 10 install.

1. Map a network drive to the installation source (as noted in the Prerequisites section). Verify Reconnect at Logon is unchecked.
2. In Explorer, select the mapped drive to see its contents in the right pane.
3. Execute **SETUP.EXE**
4. Choose **"Install PCAnywhere 10.0"**
5. Choose **"PCAnywhere for the Individual"** install for nonclinicals and **"LAN Host"** install for 3rd party clinicals
6. If prompted "You must restart your system for configuration changes made to……", select **NO**
7. If you are presented with a "Previous Version Installed" window, select **NO**. If you are not presented with a "Previous Version Installed" window, proceed to step A below
8. The system will reboot
9. Following system reboot, map a network drive to the source
10. In Explorer, select the mapped drive to see its contents in the right pane.
11. Execute **SETUP.EXE**
12. Choose **"Install PCAnywhere 10.0"**

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13.   Choose **"PCAnywhere for the Individual"** install for nonclinicals and **"LAN Host"** install for 3rd party clinicals

14.   Proceed with step A below:

A.   At the "Welcome to Symantec pcAnywhere Setup Wizard" window, select **NEXT**

B.   At the "License Agreement" window, select **"I accept the terms…."** and select **NEXT**

C.   At the "Customer Information" window, enter the User Name and Organization (site-specific information) and click NEXT.

D.   At the "Setup Type" window, verify that the "Typical" option is selected and select **NEXT**

E.   At the "Ready to Install the Program" window, select **INSTALL**

F.   Once the install completes, at the "Symantec Support Solutions" window, select **NEXT**.

G.   At the "Windows Solutions window", select **NEXT**.

H.   At the "How To Reach Us Online" window, select **NEXT**.

I.   At the "Welcome To Live Update" window, select **CANCEL**

J.   At the "Please Register Symantec PCAnywhere" window, select **SKIP**

K.   When prompted "Are you sure you want to skip the registration process?", select **YES**

L.   At the "Completing the Symantec PCAnywhere Setup Wizard" window, select **FINISH**

M.   When prompted "You must restart your system……", select **YES** and the system will reboot

N.   Following reboot, launch PCAnywhere by selecting Start->Programs->Symantec PC Anywhere from the task bar.

O.   At the "Please Register Symantec PCAnywhere" window, select **SKIP**

P.   When prompted "Are you sure you want to skip the registration process?", select **YES**

Q.   Right click on the **NETWORK** host item (or choose FILE\PROPERTIES)

R.   Select the **Connection Info**. tab

S.   Verify **TCP\IP** checkbox is checked

T.   Select the **Callers** tab

U.   Authentication type could vary site to site. It will typically be NT. Set the Authentication Type field to **NT**.

V.   Immediately under "Caller List", select the icon for **"New Item"**

W.   Choose either user or group (site-specific information)

X.   In the Domain field, select the domain that the appropriate user or group from the previous step belongs to.

Y.   In the Account field, choose either the user or group (site specific information) that will be used to access the PCAnywhere host item.

Z.   Select **OK**

AA.   Select the **Security Options** tab

BB.   In the Encryption section, in the Level field, select **PCAnywhere**

CC.   Check **"Deny lower encryption level"**

DD.   Select **OK**

EE.   You will be prompted to provide a name for the new host item. Name the host item after the name of the computer (site specific information).

FF.   Once the host item is named, double-click the host item to launch it

GG.   When prompted "The PCAnywhere host is now waiting for connections", select **OK**

HH.   Stop the PCAnywhere host item by double-clicking on the computer icon in the System Tray (lower-right corner of screen) and selecting **Cancel**.

Recovery on PCAnywhere install fault ("bluescreen")

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In any situation where Windows NT 4.0 blue screens after installing pcAnywhere, you should attempt to restart NT three times before attempting to start with "Last known good configuration." The three restarts should switch pcAnywhere to Fault Tolerant boot mode. This should allow you to restart NT, uninstall pcAnywhere, and resolve the video driver problem that caused the blue screen.

If you attempt to go to "Last known good configuration" prior to the three restarts, you will either end up doing a parallel install of NT or you will have to reinstall NT.

7.9   Hardware Installation (3rd Party Clinicals ONLY)

1. Install\verify ISOCOMM and WatchDog Timer cards

    DS1 – 1,3,4,5,8 on; 2,6,7 off

    DS2 – 1,3,4,5,7,8 on; 2,6 off

    DS3 – 1,3,4,5,6,8 on; 2,7 off

    DS4 – 1,3,4,5,6,7,8 on; 2 off

2. Install\verify serial card driver (SeaLevel)

3. Create\verify ports 5,6,7,8 in CONTROL PANEL\PORTS

4. Set IRQ's and memory settings in CONTROL PANEL\PORTS

    Port 5, 100, IRQ 5

    Port 6, 108, IRQ 5

    Port 7, 110, IRQ 5

    Port 8, 118, IRQ 5

5. Share IRQ 5 in SeaLevel Advanced Port utility

7.10   Saturn Installation

1. Map a network drive to the installation source (as noted in the Prerequisites section). Verify **Reconnect at Logon** is unchecked.

2. In Explorer, select the mapped drive to see its contents in the right pane.

3. In the right pane, select the folder **Disk1** to display its contents.

4. Execute **SETUP.EXE** found in the Disk1 folder, to begin the Saturn Installation Program. Once started, the Saturn Information System Installation window, will appear showing "Saturn Information System" , the version of the software being installed, and the copyright information for the product.

5. At the Welcome Screen, select **Next** to continue or **Cancel** to abort the setup.

6. If you choose to select **Cancel** to exit Setup (at any time during Setup), a dialog will appear with the message "Setup is not complete. If you quit the setup program now, the components you requested to add/remove will not be installed/uninstalled. You may run the setup program at a later time to complete the operations. Are you sure you want to quit the setup?" Select **Yes** to continue, **No** to quit setup.

7. If a message is presented that describes steps that have not been completed, note which steps have not been competed, select **OK** (the installation will abort), complete the steps as per the instructions provided and rerun the Saturn Installation.

8. When the Saturn Setup Application Type window appears, highlight **Clinical or Non Clinical** to choose this workstation's installation type. Select **Next** to continue or **Cancel** to abort the setup.

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9.   When the Enter Server Name Text window appears, enter the **Server Name** (site-specific information; this is the actual name of the server) and then select **Next** to continue, **Back** to return to previous page or **Cancel** to abort the setup.

10.   If the Application Type selected is Clinical, the window, Saturn Setup Power Supply Selection, will appear. Select **APC, MGE or none** (site-specific information; one must be selected) as the UPS type for this Clinical Workstation. Select on **Next** to continue or **Cancel** to abort the setup.

11.   During the installation a variety of DOS windows will appear. If you want to determine what process is taking place, minimize the DOS window. A status window is displayed that will define what process is taking place.

12.   When the Saturn Setup Start Copying Files window appears, select **Next** to begin copying Program Files or **Cancel** to abort the setup.

13.   A Setup Status Screen will appear, displaying a progress bar. This bar will indicate the progress of the copy. If Copy tries to copy a Read Only file, a message box will appear stating, "Read Only File Detected." Check the box, "Don't display this message again.", and select **Yes** to copy all read only files and to continue the copy.

14.   When the ODBC Data Source Administrator window appears, perform the following steps to verify the Server's ODBC settings:

    Select the **System DSN** tab.

    Double-click **PERIOPDM** or select **PERIOPDM** and the **Configure…** button.

    Select the **Login** tab

    In the User ID field enter the computer name (site-specific information; was used in section 7.2).

    In the Password field enter **ValleyBoys**

    Select the **Database** tab.

    Verify that the Server name is set to **SATURN** (site-specific; this refers to the name of the ASA Database Server. By default it is set to SATURN. Some sites have different names for their Saturn DB servers and the name will need to be changed manually. Example: DUMC's is SATURNP.).

    Verify that the Database name is set to **PERIOPDM**

    Select the **Network** tab

    Check **TCP/IP**

    In the TCP/IP field, enter **HOST="IP address of the server"** (site-specific information)

    Select the **ODBC** tab

    Select the **Test Connection** button

    If the ODBC settings are incorrect, you will receive a "connection failed" or similar message. Repeat/verify beginning with the fourth bullet above.

    If the ODBC settings are correct, you will receive a "connection successful" message. Proceed to the next step

    Select the **Login** tab

    Delete the information in the User ID field and Password field.

    Select **OK**

    Select **OK**. The "*ODBC Data Source Administrator*" window will close.

15.   The Saturn Setup Complete window will appear.

16.   Select **Finish** to exit the Saturn Workstation Installation program.

17.   Reboot the WPU.

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18.	Following reboot, Saturn should launch
19.	Unlock the keyboard (**Ctrl, F9; Alt, F9**) and press **Ctrl, Alt, Del**
20.	Choose **TASK MANAGER**
21.	Select the **PERFORMANCE** tab
22.	The CPU usage indicator should be spiking at approx. 95-100%. This indicates that "replication" is occurring. Once the CPU usage indicator drops to approx. 10-20% (after approx. 10-15 minutes) replication is complete.
23.	Go to the Saturn Recorder's Workstation Configuration Page.
24.	On the **General** Tab, set the **Workstation Name** to your specific site configured location.
25.	For NCPUs – deselect **Touchscreen** and verify proper video resolution (1024 X 768)

7.11 *Verify Communication with Patient Monitors (WPUs and 3rd Party Clinicals ONLY)*

1.	Launch a new case in Recorder
2.	In **Workstation Configuration** set port settings as needed (site-specific information)
3.	Once communication with patient monitors is verified, close the case without saving it.

7.12 *Setup Printers*

1.	Select **Start**->**Settings**-> **Printers** from the task bar.
2.	Double-click **Add Printer** (site-specific information; printers could be networked printers or shared off another workstation).
3.	If installing a printer from a network printer server, execute the following:

Select the **Network printer server**, then select **Next**.

Scroll down the list to find the desired printer, then double click it.

Select **Finish**.

4.	If installing an LPR printer, execute the following:

Select the **"My Computer"** radio button and select **Next**.

Select **"Add Port".**

Select **"LPR Port"** and select **"New Port".**

Under **"Name or address of server providing lpd:"**, enter the IP address of the LPR printer (site specific).

Under **"Name of printer or print queue on that server:"**, enter the queue name (site specific, often does not matter)

Select **OK**.

Select **Close**.

Select **Next**.

Choose the appropriate manufacturer and printer (or install from a network location as appropriate).

Select **Next**.

Enter the name of the printer and choose if you want it to be the default printer.

Select **Next**.

Choose **"Shared"** or **"Not shared"** as appropriate (typically, this will be "Not shared").

Select **Next**.

Select **Yes** to print a test page and select **Next**.

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> Select **Yes**.
>
> Select **Finish**.

5. Close the Printer dialog.

7.13 *Clearing the Event Log*

1. Select "**Start->Programs->Administrative Tools->Event Viewer**" from the taskbar.
2. Select "**Log->System**" from the menu.
3. Select "**Log->Clear All Events**" from the menu.
4. Select **No** to save the event log"
5. Select **Yes** to clear the System log.
6. Select "**Log->Security**" from the menu.
7. Select "**Log->Clear All Events**" from the menu.
8. Select **No** to save the event log"
9. Select **Yes** to clear the Security log.
10. Select "**Log->Application**" from the menu.
11. Select "**Log->Clear All Events**" from the menu.
12. Select **No** to save the event log"
13. Select **Yes** to clear the Application log.
14. Close the Event Viewer window.

7.14 *Copy Time.bat (NCPUs and 3rd Party Clinicals ONLY)*

1. Copy ResKit and Time folders FROM a clinical TO root.
2. Copy time.bat to root, create shortcut and rename to "time", copy shortcut to All Users\Startup and set to run minimized.
3. Copy sleep.exe to c:\nad\apps\pdm folder
4. Edit time.bat… after net time line add the following:

> "cd\;cd c:\nad\apps\pdm;sleep 5;caseeditor.exe;exit"

7.15 *Verify Correct Virtual Memory Settings On Saturn Clinical Workstations*

1. Select "**Start->Settings->Control Panel**" from the taskbar.
2. Select "**System**".
3. At the System Properties window, note the amount of physical RAM in the WPU – this will be indicated toward the bottom of that window (will be approximately one of the following – 64, 128 or 256.)
4. Select the **Performance** tab.
5. Verify that the virtual Memory setting is 2 times what the amount of physical RAM was in the WPU (ex. – if physical RAM was 128, virtual memory should be 256 MB.)
6. If the virtual memory setting is correct, go to next section.
7. If the virtual memory setting is not correct, select the **Change** button – a virtual memory window will appear.
8. Under **Drive**, select the **C:** drive.
9. Under the **Paging File size For Selected Drive** section, change both the **Initial Size** field and the **Maximum Size** field values to be 2 times the amount of physical RAM in the WPU.
10. Select the **Set** button.

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11.   Select **OK** to the Virtual Memory window.

12.   Select **OK** at the System Properties window.

13.   Proceed with the remainder of the Saturn Workstation Installation Procedures.

7.16   <u>CCOW Setup (Only if a site is to have CCOW enabled – site specific information)</u>

1.   Clinical:

   a.   Open **Task Manager** and choose the **Applications** tab

   b.   Choose **System One** and select **End Task** - the System One and Proto applications will close.

   c.   Once the System One and Proto applications close, choose **Saturn - Recorder** and select **End Task** – when prompted to end the task select **End Task**.

   d.   Choose the **Processes** tab

   e.   Locate **NADREP~1.EXE** (replication agent) in the list and select **End Process**

   f.   A **Task Manager Warning window** will appear, select **YES**

   g.   Close Task Manager

2.   Nonclinical:

   a.   Close Recorder by choosing **File\Exit** in Saturn.

   b.   Verify that **NADREP~1.EXE** is stopped

   c.   Open **Task Manager** and choose the **Processes** tab

   d.   Locate **NADREP~1.EXE** (replication agent) in the list and select **End Process**. If it is not in the list, it is not running. Skip to step f below.

   e.   A **Task Manager Warning window** will appear, select **YES**

   f.   Close Task Manager

3.   Map a network drive to the installation source (as noted in the Prerequisites section). Verify Reconnect at Logon is checked

4.   Execute **SETUP.EXE**

5.   If you receive a prompt stating an update for JavaVM is necessary:

   a.   Select **YES**

   b.   Once the update is complete, reboot the workstation. <u>Clinicals</u> – keep Saturn from launching following reboot by holding down the shift key at NT startup. Will need to enter the appropriate user password (site-specific information) to logon.

   c.   The installation will automatically resume.

6.   Accept all defaults to licensing and path prompts

7.   When prompted for the Virtual IP or Network Name of the Sentillion Network Appliance, enter the appropriate values (site-specific information).

8.   Installation will complete

9.   Disconnect the mapped network drive

10.   Reboot the workstation

11.   Clinical - allow Saturn to launch. Nonclinical – launch Saturn

12.   Update Context Rules (note: this step may not be required. Consult with Context Manager.)

   a.   Request the hospital's Context Manager to remove the Subject rules or provide a work-around to the rules for the computer name that has been upgraded. Continue after the configuration change has been completed.

      i.   Saturn supports the Patient Subject only.

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    ii.   The site may apply rules to their Context Management system that requires other Subject setting prior to Patient Subject setting. These rules must be removed or the hospital must provide a work-around per workstation prior to enabling Clinical context in Saturn.

13.   Execute the List Manager application, select **System Configuration** from the Utilities menu, enter the site specific **CCOW Application Key Name** and select **OK**.

14.   Execute the following items for each workstation that will be running CCOW:

Select **Workstation Configuration** from the Utilities menu in the Recorder application

Check the **CCOW Enabled** checkbox

Check the **Join Context at Startup** checkbox

Reboot the workstation

*** SATURN WORKSTATION INSTALLATION COMPLETE***

8   UNINSTALL

8.1   *Preparation for Uninstall of Saturn*

NOTE: If Saturn is being uninstalled on a clinical workstation running Windows 2000, see the Windows 2000 section on *Preparation for Uninstall of Saturn on a Clinical Workstation* and then continue with the steps outlined in this section.

The following steps must be executed in order to prepare a workstation for uninstalling Saturn:

1.   Ensure that the workstation is not currently running a case.

2.   For clinical workstations, record the Saturn port settings.

3.   Exit Saturn on a clinical workstation as follows: Using the Task Manager application, end the applications in the following order: System 1 (wait for Proto to end before continuing), Recorder and NADRepAgent process (NADREP~1.EXE).

                        Or

    Exit Saturn on a non-clinical workstation as follows: Close all Saturn applications and using the Task Manager application, close the System 1 application and NADRepAgent process if necessary.

8.2   *Uninstalling Saturn*

The following steps must be executed in order to uninstall Saturn on a clinical or non-clinical workstation:

1.   Execute the Control Panel Add/Remove Programs, select Saturn and Add/Remove.

2.   Select **Remove** in the Install Shield Wizard Welcome screen, select **Next>** then **OK**.

3.   If presented with a window "Locked File Detected", select **Ignore**.

4.   If presented with a window "Shared File Detected", select **No**.

5.   Select **Finish** in the Install Shield Wizard Maintenance Complete screen and close the Add/Remove Programs and Control Panel windows.

6.   Using Windows NT Explorer, delete the C:\NAD folder.

7.   Reboot.

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    8.   Perform the Saturn installation per the Install New Versions section on *Saturn Installation*.

9   WINDOWS NT WORKSTATION TEST PROCEDURE

9.1   *Document General Workstation Information*

Note: The **Results Sheet** is located at the end of this chapter as well as in Section 10.

1.   Record **Hospital Name**, **Address** and **Install Date** on the Results Sheet.

2.   Record **Location** of the WPU on the Results Sheet.

3.   Record the anesthesia machine to which Saturn is mounted, as **Mount** on the Results Sheet.

4.   Record the type of **UPS** the WPU is connected to on the Results Sheet.

5.   Record the type of workstation as **C** for clinical or **NC** for non-clinical on the Results Sheet.

6.   For clinicals, record the **Type** of clinical as **WPU** for Dräger 400 MHz, **HPU** for 3rd party clinicals or **AOU** for Advantech All-in-One unit on the Results Sheet.

7.   Record the WPU S**erial Number** and **Part Number** on the Results Sheet.

8.   Record **Domain Username** and **Password** on the Results sheet.

9.   Record **Local Administrator Username** and **Password** on the Results sheet.

10.   From the Start Menu, click **Run**, type **cmd** in the edit box and press the **Enter** key.

11.   At the command prompt type **cd ** and press the **Enter** key.

12.   At the command prompt type **ipconfig /all** and press the **Enter** key. The IPConfig window will appear.

13.   Record the following information on the Results Sheet:

Host Name as **Computer Name**
Physical Address as **NIC Address**
IP Address
Subnet Mask
Default Gateway

Figure 1 Workstation Command Window

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14.   At the Command prompt, type **explorer** and press the **Enter** key. The windows explorer window will appear.

15.   Right click on **Network Neighborhood** and choose **Properties.** The Network properties dialog will appear.

16.   Record the **Domain** on the Results form.

17.   Click **Cancel** on the Network Properties dialog.

18.   Click **Start, Programs, Administrative Tools**, then select **Windows NT Diagnostics**.

19.   Record the **Windows NT Version** from the **Version** tab on the Results sheet.

20.   Close the **Windows NT Diagnostics** dialog by clicking **OK**.

21.   Close Windows Explorer and the Command window.

22.   From the Start Menu, click **Programs**, **Sybase** and then click **Sybase Central**.

23.   Sybase Central will appear, select **Help** from the file menu and click **About**.

24.   Record the Adaptive Server Anywhere Plug-in version as the **Sybase Version** on the Results Sheet.

25.   Click the **OK** button to close the About Sybase Central dialog.

26.   Click the **Tools** file menu and select **Connect**. The Connect to Adaptive Server Anywhere dialog will appear.

27.   Enter the appropriate User ID and Password.

28.   Click **OK**. The Connect to Adaptive Server Anywhere dialog will close and the Sybase Central window will appear.

29.   Record the name displayed under *Utilities* as the **Server Database Name** on the Results Sheet.

30.   Close the Sybase Central window.

31.   From the Start Menu, click **Settings**, then **Printers**.

32.   Record the name of each installed printer on the Results Sheet.

33.   Right-click the printer icon and choose **Properties**. Record the **Driver** installed for that printer from the **General** tab.

34.   Choose the **Ports** tab and record the port used. If LPR printing is utilized, record the IP address of the printer as well. (Repeat steps 27 and 28 for each installed printer)

35.   Restart the computer.

9.2   *Testing the Saturn System*

1.   Does the System autolog onto Windows NT?   Record the results on the Results Sheet.

2.   Does the System One diagnostic screen appear?

3.   Verify the **System One CRC checks** complete and record the results on the Results Sheet.

4.   Are the **Version labels** displayed on the diagnostics screen correct? Record the results on the Results Sheet.

5.   Record the **PDM Application** version as **Saturn Version** of the Results Sheet.

6.   Does the SYSTEM FUNCTIONAL message appear on the System One diagnostic screen? Record the results on the Results Sheet.

7.   The Saturn main logon screen should appear, Enter **NAD** in the username box and click **OK**.

8.   Is the **Saturn logon successful**?   Record the results on the Results Sheet.

9.   Click on the **Logout** button in the menu at the top of the screen, the Saturn main logon screen should appear.

(*Steps 9 through 12 should be performed from one non-clinical or clinical workstation only*)

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10.   At the Saturn main logon screen, enter **NAD** in the username box and click **OK**.

11.   Select the **Utilities** file menu and choose **List Manager**, the List Manager window will appear.

12.   Click the + next to **Drugs** and select **Induction** in the left pane.

13.   De-select the check box next to the drug **thiopental** from the right pane.

14.   Select **File** from the file menu and chose **Exit** to close List Manager, save your changes.

15.   Click on the **Logout** button in the menu at the top of the screen, the Saturn main logon screen should appear.

16.   (*Steps 16 through 24 should be performed from all WPU's and non-clinical workstations*)

17.   At the Saturn main logon screen, enter **NAD** in the username box and click **OK**

18.   At the main Saturn window, select **File**, then select **New Case**.

19.   Click the **Add Drug** button at the top of the screen, the Add Drug dialog will appear.

20.   Click the **Induction** tab of the Add Drug dialog, verify **thiopental** is not listed and click **OK**.

21.   If the above is true - **List Manager is functional**, record the results on the Results Sheet.

22.   Click the **Cancel** button in the Add Drug dialog box.

23.   Click on the **Close Case** button in the menu at the top of the screen.

24.   A dialog box will appear asking if you want to save the case - select **NO**.

25.   Click on the **Logout** button in the menu at the top of the screen, the Saturn main logon screen should appear.

9.3   Modifying Drug Entries

(*Perform this step from one WPU or non-clinical workstation only*)

1.   At the Saturn main logon screen, enter **NAD** in the username box and click **OK**

2.   Select the **Utilities** file menu and choose **List Manager**, the List Manager window will appear.

3.   Click the + next **Drugs** and select **Induction** in the left pane.

4.   Select the check box next to the drug **thiopental** from the right pane.

5.   Select **File** from the file menu and choose **Exit** to close List Manager, save your changes.

9.4   Replication Verification

1.   Double click on the **NADRepAgent** icon in the system tray within the taskbar.

Figure 2 NADRepAgent Icon

2.   Verify that the Replicator Status is Active.
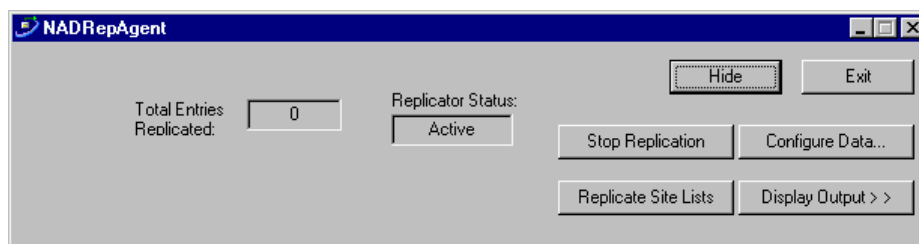
Figure 3 NADRepAgent Dialog

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3.   Click **Hide** to close the dialog and enable the keyboard filter by pressing **F9**.

4.   **NADRepAgent is functional** – Record the results on the Results sheet.

9.5   *Loopback Test*

NOTE: Saturn System and Proto must be closed

1.   On the back of the WPU, connect a serial cable to COM 5 and COM 6.

2.   On the back of the WPU, connect a serial cable to COM 7 and COM 8.

3.   From the Start Menu, click **Find** then **Files or** Folders… the Find: All Files dialog box will appear.

4.   In the **Named:** field type"**loop.exe**." and click on the **Find Now** button.

5.   In the lower part of the Find: Files dialog box, double-click on **loop.exe**.

6.   A DOS window should appear containing the following text:

   characters, rxb_buffer=0 STRING IS SENT FROM COM 5 TO COM 6

   characters, rxa_buffer=1 NOW, SENT FROM COM 5 TO COM 6

   characters, rxb_buffer=0 STRING IS SENT FROM COM 7 TO COM 8

   characters, rxa_buffer=1 NOW, SENT FROM COM 7 TO COM 8

   This text will repeat itself.

7.   If the above occurs, the **Loopback Test** is successful, record the results on the Results Sheet.

8.   Close the DOS window by clicking on the X in the upper right hand corner of the window.

9.   Close the Find Files window by clicking on the X in the upper right hand corner of the window.

9.6   *PCAnyWhere Verification*

1.   Click **Start**, **Programs**, **PCAnywhere** to open PCAnywhere.

2.   Click the **Hosts** button to view all host items.

3.   Double-click the host icon with the workstation name to start the PCAnywhere Host service.

4.   If the **Host Service is functional**, record the results on the Results Sheet.

5.   Record **PCAnywhere Username** and **Password** on the Results Sheet.

6.   Record the version of PCAnywhere installed and type of installation as **H** for Host Only or **HR** for Host and Remote on the Results Sheet.

7.   Restart the computer.

9.7   *Recording Installed Modules and Applications*

NOTE: The following steps should be performed from one workstation only

1.   Click **Start** -> **Programs** -> **Sybase** -> **Sybase Central.** The Sybase Central window will appear.

2.   Click the **Tools** file menu and select **Connect**. The Connect to Adaptive Server Anywhere dialog will appear.

3.   Enter the appropriate User ID and Password.

4.   Click **OK**.   The Connect to Adaptive Server Anywhere dialog will close and the Sybase Central window will appear with a connection to the server database.

5.   Click on the + symbol next to the server database name to expand the list.

6.   Right-click on **periopdm (NAD)** and choose **Open Interactive SQL** from the context menu. An Interactive SQL window will appear.

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7.   Type the following select statement in the **Command window**, which is in the bottom half of the Interactive SQL window. Highlight all text and click the **Execute** button.

SELECT WorkstationName_str, InstalledModules_wrd FROM LocalConfiguration;
OUTPUT TO c:\WkstnCfg.dat FORMAT TEXT

8.   The filename and drive may be changed to accommodate the configuration of the workstation from which you are working.

9.   Confirm the file was created in the directory you specified. If the file exists, close all Sybase windows.

10.   Open the WkstnCfg.dat file in Notepad and print the file.

11.   Close and delete the file. Attached the printout to the Results Sheets.

*** END OF THE SATURN NT WORKSTATION TEST INSTRUCTIONS ***

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10 INSTALL NEW VERSIONS ON WINDOWS 2000

10.1 *Post Gold Drive Preparation for Install*

1.   Select **Yes** or **OK** to any prompts requesting a reboot related to new hardware detection or installation.

10.2 *Configure WPUs (400 MHz WPUs only)*

1.   Select **Start->Settings->Control Panel** from the task bar. Select Display.

2.   Select the **Settings** tab.

3.   Change the **Screen Area** to 1024x768.

4.   Change the **Colors** to High Color (16)bit

5.   Select the **Advanced** button.

6.   Select the **General** tab.

7.   Select **Small Fonts**.

8.   Select the **Monitor** tab.

9.   Select **Refresh Frequency** – 75Hz

10.   Select **OK** to close the Display Properties window**.**

11.   Select **Start->Settings->Control Panel** from the task bar. Select **Administrative Tools**.

12.   Select **Computer Management**.

13.   Select the **Device Manager**.

14.   Expand Ports

15.   Double-click on COM port number 5.

16.   Select the **Resource** tab.

17.   Select "**Set configuration manually".**

18.   Set the IRQ to the appropriate value (use Gold Drive matrix to determine IRQ settings: M2R3 images (Part #4115985, Serial #10000-10086) have an IRQ of 9; all other 400 MHz images have an IRQ of 11)

19.   Select the **OK** button.

20.   Select the **OK** button.

21.   Select **No** to the reboot question for COM 5, 6 and 7 and select **Yes** for COM 7.

22.   Repeat Steps 15 through 18 for COM port numbers 6, 7 and 8

23.   Execute loopback test (c:\utils\loop_test\loop.exe).

10.3 *Configure BIOS (AOPUs only)*

1.   Apply power to AOPU.

2.   Verify BIOS Revision 2A69KAKJC displayed on the top of the display.

3.   Select <**DEL**> during the boot process to enter the BIOS setup when presented with this option. The system BIOS entries should be made as follows:

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Standard CMOS Setup (Screen)

System Date:	<current date>
System Time:	<current time>
Primary IDE Master:	Auto
Primary IDE Slave:	None
Secondary IDE Master:	None
Secondary IDE Slave:	None
Drive A:	None
Drive B:	None
Video:	EGA/VGA
Halt On:	All, But Keyboard

BIOS Features Setup (Screen)

Virus Warning:	Disabled
CPU Internal Cache:	Enabled
External Cache:	Enabled
CPU L2 Cache ECC Checking:	Enabled
Processor Number Feature	Disabled
Quick Power on Self Test:	Disabled
Boot From LAN First	Disabled
Boot Sequence:	C only
Swap Floppy Drive:	Disabled
Boot Up Floppy Seek:	Disabled
Boot Up Num Lock Status:	Off
A20 Gate	Fast
Typematic Rate Setting:	Disabled
Typematic Rate (Char/Sec):	6
Typematic Delay (Msec):	250
Security Option:	Setup
PS/2 Mouse function Control	Enabled
PCI/VGA Palette Snoop:	Disabled

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OS Select of DRAM > 64 Mbytes:	Non-OS2
Report No FDD for Win 95	Yes
Video Bios Shadow	Disabled
C8000-CBFFF Shadow	Disabled
CC000-CFFFF Shadow	Disabled
D0000-D3FFF Shadow	Disabled
D4000-D7FFF Shadow	Disabled
D8000-DBFFF Shadow	Disabled
DC000-DFFFF Shadow	Disabled

Chip Set Features Setup (Screen)

Auto Configuration	Disabled
EDO CAS MA Wait State	2
EDO RAS Wait State	2
SDRAM CAS Latency:	3
SDRAM RAS to CAS Delay:	3
SDRAM RAS Pre-charge time:	3
SDRAM Pre-charge Control:	Disabled
DRAM Data Integrity Mode:	non-ECC
System BIOS Cacheable:	Enabled
Video BIOS Cacheable:	Disabled
Video RAM Cacheable:	Disabled
8 Bit I/O Recovery Time:	3
16 Bit I/O Recovery Time:	2
Memory Hole at 15M to 16M:	Disabled
Passive Release :	Enabled
Delay Transaction:	Disabled
AGP Graphics Aperture:	64 MB
Power Supply Type:	AT
Auto Detect DIMM/PCI Clock:	Enabled
Spread Spectrum:	Disabled
CPU Host Clock (CPU/PCI):	Default

CPU Warning Temperature: Disabled

Power Management Setup (Screen)

Power Management: User Defined

PM Controlled by APM: Yes

Video Off Method: V/H Sync and Blank

Video Off After: Standby

Modem Use IRQ: NA

Doze Mode: Disabled

Standby Mode: Disabled

Suspend Mode: Disabled

HDD Power down: Disabled

Throttle Duty Cycle   62.5%

PCI/VGA Active Monitor: Disabled

Soft-Off by PWR-BTTN: Instant-Off

PWRON After PWR-Fail: Always On

Resume on Ring: Disabled

IRQ8 Break Suspend: Disabled

PCI/Plug and Play Setup (Screen)

PNP OS Installed: Yes

Resources Controlled By: Manual

Reset Configuration Data: Disabled

IRQ-3 Assigned to: PCI/ISA PnP

IRQ-4 Assigned to: PCI/ISA PnP

IRQ-5 Assigned to: PCI/ISA PnP

IRQ-7 Assigned to: PCI/ISA PnP

IRQ-9 Assigned to: Legacy ISA

IRQ-10 Assigned to: PCI/ISA PnP

IRQ-11 Assigned to: Legacy ISA

IRQ-12 Assigned to: PCI/ISA PnP

IRQ-14 Assigned to: PCI/ISA PnP

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IRQ-15 Assigned to   PCI/ISA PnP

DMA-0 Assigned to: PCI/ISA PnP

DMA-1 Assigned to: PCI/ISA PnP

DMA-3 Assigned to: PCI/ISA PnP

DMA-5 Assigned to: PCI/ISA PnP

DMA-6 Assigned to: PCI/ISA PnP

DMA-7 Assigned to: PCI/ISA PnP

Used MEM Base Address: N/A

Assign IRQ to USB: Enabled

Integrated Peripherals (Screen)

IDE HDD Block Mode: Enabled

On-Chip Primary PCI IDE: Enabled

On-Chip Secondary PCI IDE: Disabled

IDE Primary Master PIO: Auto

IDE Primary Slave PIO: Auto

IDE Primary Master UDMA: Auto

IDE Primary Slave UDMA: Auto

Onboard PCI LAN Chip: Enabled

USB Keyboard Support: Disabled

Init Display on First: PCI Slot

KBC Input Clock: 8 MHz

Onboard FDC Controller: Enabled

Onboard Serial Port1:   3F8

Onboard Serial Port2:   2F8

UART Mode: Normal

Onboard Parallel Port: Disabled

Onboard Serial Port1:   3E8

Onboard Serial Port2:   2E8

Serial Port 1/2/3/4 IRQ: 4/3/10/5

Vector Hi/Low Select   Low

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Vector Address Decode: 200

Password Setting (Screen)

Password: NAD123

4.   Select <**F10**> to save and exit the system BIOS.
5.   Press 'Y' and select <**Enter**> to reboot the system.

10.4 *Configure Network Properties*

1.   Select **Start->Settings->Control Panel** on the task bar. Select **System**.
2.   Select the **Network Identification** tab.
3.   Select the **Properties** button.
4.   Change the **"Computer Name:"** field to desired name (site-specific information).
5.   Record this value.
6.   Select the **OK** button.
7.   Select **OK** at the "You must reboot this computer…" prompt.
8.   Verify that the Computer Name is correct.
9.   Select **OK** on the System Properties window.
10.   Select **Yes** if prompted for a reboot.
11.   Select **Start->Settings->Control Panel** from the task bar. Select **Network and Dial-Up Connections**.
12.   Select **Local Area Connection** and press **Alt**+**Enter**.
13.   Select **Net buei and uninstall**.   Select **No** to reboot.
14.   Select **Internet Protocol (TCP/IP)** and select **Properties**.
15.   If using static IP addressing, execute the following steps:

Ensure that the **"Use the following IP address"** radio button is selected.

Enter the desired **"IP Address", "Subnet Mask"**, and optional **"Default Gateway"** data (site specific information). Record these values.

EXAMPLE DATA:
IP Address: 10.0.0.100
Subnet Mask: 255.0.0.0
Gateway: 10.0.0.1

Select **Advanced…** button to access WINS and DNS settings.

Enter any WINS or DNS information in the appropriate tabs.

Select **OK** to close Advanced TCP/IP Properties window.

16.   If using dynamic or DHCP addressing, select the "**Obtain an IP address automatically**" radio button.
17.   Select **OK** to close the Internet Protocol (TCP/IP) Properties window.
18.   Check the **"Show icon in taskbar when connected"** check box**.**
19.   Select **OK** to close Local Area Connection Properties window.
20.   If prompted for a reboot, select **Yes**.

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21.   Select **Start->Settings->Control Panel** on the task bar. Select **System**.

22.   Select the **Network Identification** tab.

23.   Select the **Properties** button.

24.   Press **Alt**+**D**, then press **Tab** to select the **Domain** radio button.

25.   Enter the desired domain name (e.g. "SATMAN" – site specific information). Record this value.

26.   Select the **OK** button.

27.   Enter a username and password with access to add computers to the domain (site specific information).

28.   Select **OK** at the "Welcome to the…" prompt.

29.   Select **OK** at the "You must reboot…" prompt.

30.   Select **OK** to close the System Properties window.

31.   Select **Yes** to reboot.

32.   To log in as local administrator, press **CTRL-ALT-DEL**, select the **Options** button, enter the local administrator password and select the local computer name from the drop-down box.

NOTE: **Perform these steps for the 4sys Clinical Workstation only:**

33.   **Copy Files to Hard Drive**
   - i.   Open Windows Explorer.
   - ii.   Copy UTILS directory from CD to the local PC c:\
   - iii.   In the local c:\utils directory run **ldfiles.bat**

34.   **Password**
   - i.   Log in as Local Administrator (no password).
   - ii.   Select CTRL-ALT-DEL.
   - iii.   Select **Change Password**.
   - iv.   Change password to "NAD123NAD123".
   - v.   Select OK.
   - vi.   Select OK.
   - vii.   Press ESC.
   - viii.   Open the control panel.
   - ix.   Select **Users and Passwords**.
   - x.   Delete user **CWS-W2K**. Then select YES.
   - xi.   Select **Advanced** tab.
   - xii.   Verify Required users press CTRL-ALT-DEL before logging on.   is checked.
   - xiii.   Close Users and Passwords.
   - xiv.   Close Control Panel.
   - xv.   Browse to C:\utils\Reskit\autolog.exe
   - xvi.   Enable autolog.exe with password above.

35.   **Windows Updates to Install**
   - i.   Verify the OS patch level is current with the Windows update server.
   - ii.   Reboot**.**

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    36.   **Saturn Logo**

        i.   From the START MENU choose the RUN command. Type <**regedit**> in the window and press <**OK**>. This will launch the registry editor.
        ii.   In the HKEY_USERS\default\control panel\desktop key, change the parameter WALLPAPER to **Saturnlogo.BMP**.
        iii.   Close the regedit window.
        iv.   Open **Display Properties Window** in the control panel.
        v.   Select **Background** Tab.
        vi.   Choose **SATURNLOGO** in wallpaper.
        vii.   Select <**Apply**>.
        viii.   Select <**OK**>.
        ix.   Close Display Properties Window and the Control panel.
        x.   Select **WinZip** from system tray.
        xi.   Select **Next**.
        xii.   Select **Yes** to accept agreement.
        xiii.   Select **Next**.
        xiv.   Select **WinZip Classic** Select **Next**.Select **Express Setup**. Choose **Next**.
        xv.   Select **Finish**.
        xvi.   Select **never show tips at startup**. Select **close**.
        xvii.   Select **options**.
        xviii.   Select **configuration**.
        xix.   Select **system** tab.
        xx.   Deselect **Quick Pick**, **startup menu** and **desktop**.
        xxi.   Ok. Close WinZip.

    37.   **Disable Autolog.exe**

        i.   Browse to C:\utils\Reskit\Autolog.exe
        ii.   Launch Autolog.exe
        iii.   Select **Remove Autolog**.

    38.   **Disable Elo Touch Programs**

        i.   Open control panel.
        ii.   Select **Add/Remove Programs**.
        iii.   Remove **Monitor mouse**.
        iv.   Select **Yes** to reboot.
        v.   Logon as Local Administrator.

10.5   *Give User Local Administrator Privileges*

    1.   Select **Start->Settings->Control Panel** from the task bar. Select **Users and Passwords**.

    2.   Select the **Advanced** tab.

    3.   Select the **Advanced** button.

    4.   Move to the **Groups** folder.

    5.   Highlight **Administrators**, and press **Enter**.

    6.   Select the **Add** button.

    7.   Change the "Look-in" field so that the Domain name is shown.

    8.   Enter a username and password with access to obtain the user list of the domain (site specific information).

    9.   Select the user (e.g. "wpuser" – site specific information) from the Names list.

    10.   Select the **Add** button.

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11.　　　Select any Domain Admins account created for Saturn use (e.g. "satadmin" – site specific information).

12.　　　Select the **Add** button.

13.　　　Select the **OK** button.

14.　　　Verify that the user appears in the Members list.

15.　　　Select the **OK** button.

16.　　　Close the "User Manager" Dialog.

17.　　　Close the Local Users and Groups window.

18.　　　Select **OK** to close the Users and Passwords window.

19.　　　Select **Start->Shutdown** from the task bar. Select Log off administrator. Select **OK** while holding down the Shift Key during log off to disable autologon. Make sure that the shift key remains held down during the entire log off process.

20.　　　Press **Ctrl**+**Alt**+**Delete** to open log on window.

21.　　　Select the **Options>>** button if necessary to expand the Log on to Windows dialog.

22.　　　Enter username, password, and select the appropriate domain from the dropdown list.

23.　　　Select **OK** to log on.

24.　　　Deselect the "Show this screen at startup" check box and select **Exit**.

10.6　Set Autolog (All Clinicals - NCPUs only if a dedicated Saturn workstation)

1.　　　Open Windows Explorer.

2.　　　Explore to C:\utils\reskit

3.　　　Execute **autolog.exe** to launch the AUTOLOG utility

4.　　　Enter the appropriate password (site-specific information)

5.　　　Select **OK**

6.　　　The AUTOLOG ENABLED dialog box will appear – select **OK**

7.　　　Select **Start->Shutdown** from the task bar and choose Restart the system.

8.　　　If autolog was configured properly, the WPU will log on.

10.7　Set Time, Time Zone, And Styles

NOTE: This step configures the Windows 2000 Time Zone. Both the Server and workstation should be set the same. This is required for the time synchronization to occur

1.　　　Select **Start**->**Settings**->**Control Panel** from the task bar. Select **Date/Time**.

2.　　　Set the time as required.

3.　　　Select the **Time Zone** tab.

4.　　　Select the appropriate time zone.

5.　　　Deselect **Automatically adjust clock for daylight saving changes**, if necessary.

6.　　　Select **OK** to close **Date/Time** dialog.

7.　　　Select **Start**->**Settings**->**Control Panel** on the task bar. Select **Regional Options** to set the Time and Date styles.

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8.   Select **Time** tab and set Time Style to **HH:mm:ss,** if necessary.

9.   Select the **Date** tab.

10.   Set Short date style to **MM/dd/yyyy,** if necessary.

11.   Select **Apply**, if necessary.

12.   Select **OK** to close Regional Options Dialog.

10.8   *Set Display Power Setting*

1.   Select **Start->Settings->Control Panel** from the task bar.
2.   Select **Power Options**.
3.   Set "Power Schemes" to **Always On**.
4.   Set all drop-down boxes to **Never.**
5.   Select **Advanced tab**.
6.   Set "When I press the Power Button on my computer" option to **Power Off**.
7.   Select the **Hibernate tab**.
8.   Uncheck **Enable hibernate Support**.
9.   Select **OK** to close the Power Options Properties window.

NOTE: 4sys hardware does not need the UPS configured (10.9 and 10.10).

10.9   *Set APC UPS Setting*

1.   Select **Start->Settings->Control Panel->Power Options** from the task bar.
2.   Select the **UPS** tab.
3.   Select **Select…** in the Details window.
4.   Select **American Power Conversion** (for white APC UPS) from drop down and select corresponding model.
5.   Select **COM2** as the port.
6.   Select **Finish**.
7.   Select **Apply** and wait to see if the UPS initializes communication.

      If UPS cannot initialize communication, do the following:

            Select **Select…**

            Select **COM5** as the port

            Select **Finish**

            Select **Apply**

            Select **Select…**

            Select **COM2** as the port

            Select **Finish**

            Select **Apply**

      Wait for UPS status information to update.

8.   Select **Configure**.
9.   Change **"Seconds between subsequent power failure notifications"** to 300 seconds.
10.   Uncheck **"Finally, turn off UPS"**.

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11.   Select **OK**.
12.   Close the Control Panel window.

10.10 Set MGE UPS Setting

NOTE: For an MGE UPS to work with these Windows 2000 settings, an MGE cable must be installed between the workstation and the UPS (MGE cable - Part No. 66047).

1.   Select **Start->Settings->Control Panel->Power Options** from the task bar.
2.   Select the **UPS** tab.
3.   Select **Select…** in the Details window.
4.   Select **Generic** from drop down and select **Custom** for the model.
5.   Select **COM2** as the port.
6.   Select **Next>**.
7.   Set the following UPS Signal Polarities:
           Power Fail/On Battery: **Negative**
           Low Battery: **Negative**
           UPS Shutdown: **Negative**
8.   Select **Finish**.
9.   Select **OK**.
10.   Select **OK** to error message.
11.   Select **OK** to close Power Options window.
12.   Select **Start->Run** from the task bar.
13.   Enter **regedit** in the edit box and select **OK**.
14.   Go to **HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services\UPS** in the registry.
15.   Change **Port** data to **COM2**.
16.   Close Registry Editor window.
17.   Select **Start->Settings->Control Panel->Power Options** from the task bar.
18.   Select the **UPS** tab.
19.   Select **Select…** in the Details window.
20.   Select **Generic** from drop down and select **Custom** for the model.
21.   Select **COM2** as the port.
22.   Select **Next>**.
23.   Set the following UPS Signal Polarities:
           Power Fail/On Battery: **Negative**
           Low Battery: **Negative**
           UPS Shutdown: **Negative**
24.   Select **Finish.**
25.   Select **Apply** and wait to see if the UPS initializes communication.
26.   Select **Configure.**
27.   Change "**Seconds between subsequent power failure notifications**" to 300 seconds.
28.   Uncheck "**Finally, turn off UPS**".
29.   Select **OK**.
30.   Select **OK**.
31.   Close Control Panel window.

10.11 Install the Touchscreen (Clinicals ONLY

NOTES: If upgrading a 3rd party clinical – touch screen is already installed. DO NOT run the following steps.

1.   Explore to C:\UTILS\elotouch\win2k (if installing a 3rd party clinical, will need to copy UTILS folder from a WPU or map a network drive to a share on another computer)

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    2.   Execute **SETUP.EXE**

    3.   At "Welcome" window, select **NEXT**

    4.   At "Software License Agreement" window, select **YES**

    5.   At "Select COM Port" window, select COM4 on Advantech systems, COM6 for 4sys CWS, COM1 on WPUs, and select **NEXT**.

    6.   Select **Yes** to Digital Signature Not Found dialog.

    7.   Select **FINISH**.

    8.   Select **Yes** at reboot prompt (for AOPUs and 4sys CWS).

    9.   Execute the following for WPUs ONLY:

            Select **No** at reboot prompt.

            Select **Start->Run** from the task bar.

            Enter **regedit** and press the **ENTER** key.

            Browse to the key HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\ELOTouchscreen\NTSerial0"

            Change the Hardware Handshaking value from 1 to 0.

            Browse to the key HKEY_LOCAL_MACHINE\SYSTEM\ControlSet001\Services\ELOTouchscreen\NTSerial0

            Change the Hardware Handshaking value from 1 to 0.

            Restart the computer.

    10.   After the system has rebooted, calibrate the touch screen and select **Yes**.

    11.   Select **Finish**.

    12.   Select the sound tab and uncheck the Enable Click Sounds option.

    13.   Select **OK**

10.12 Install PCAnywhere 10.5

Clinicals

    1.   Explore to C:\UTILS\PC Anywhere

    2.   Execute **HOSTLAN.EXE** to launch the install

    3.   Proceed with step A below:

NCPUs

NOTE: DO NOT uninstall previous versions of PCAnywhere using the ADD\REMOVE PROGRAMS function in Control Panel prior to running the PCAnywhere version 10.5 install.

    1.   Map a network drive to the installation source (as noted in the Prerequisites section). Verify Reconnect at Logon is unchecked.

    2.   In Explorer, select the mapped drive to see its contents in the right pane.

    3.   Execute **SETUP.EXE**

    4.   Choose **"Install PCAnywhere 10.5"**

    5.   Choose **"PCAnywhere for the Individual"** install for nonclinicals and **"LAN Host"** install for 3rd party clinicals

    6.   If prompted "You must restart your system for configuration changes made to……", select **NO**

    7.   If you are presented with a "Previous Version Installed" window, select **NO**. If you are not presented with a "Previous Version Installed" window, proceed to step A below

    8.   The system will reboot

    9.   Following system reboot, map a network drive to the source

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10.	In Explorer, select the mapped drive to see its contents in the right pane.	
11.	Execute **SETUP.EXE**	
12.	Choose "**Install PCAnywhere 10.5"**	
13.	Choose **"PCAnywhere for the Individual"** install for nonclinicals and **"LAN Host"** install for 3rd party clinicals	
14.	Proceed with step A below:	

A.	At the "Welcome to Symantec pcAnywhere Setup Wizard" window, select **NEXT**
B.	At the "License Agreement" window, select "I accept the terms…." and select **NEXT**
C.	At the "Customer Information" window, enter the User Name and Organization (site-specific information) and click **NEXT**.
D.	At the "Setup Type" window, verify that the "Typical" option is selected and select **NEXT**
E.	At the "Ready to Install the Program" window, select **INSTALL**
F.	Once the install completes, at the "Symantec Support Solutions" window, select **NEXT**.
G.	At the "Windows Solutions window", select **NEXT**.
H.	At the "How To Reach Us Online" window, select **NEXT**.
I.	At the "Welcome To Live Update" window, select **CANCEL**
J.	At the "Please Register Symantec PCAnywhere" window, select **SKIP**
K.	When prompted "Are you sure you want to skip the registration process?", select **YES**
L.	At the "Completing the Symantec PCAnywhere Setup Wizard" window, select **FINISH**
M.	When prompted "You must restart your system……", select **YES** and the system will reboot
N.	Following reboot, launch PCAnywhere by selecting Start->Programs->Symantec PC Anywhere from the task bar.
O.	At the "Please Register Symantec PCAnywhere" window, select **SKIP**
P.	When prompted "Are you sure you want to skip the registration process?", select **YES**
Q.	Right-click the **NETWORK** host item (or choose FILE\PROPERTIES)
R.	Select the **Connection Info.** tab
S.	Verify TCP\IP checkbox is checked
T.	Select the **Callers** tab
U.	Authentication type could vary site to site. It will typically be NT. Set the Authentication Type field to NT.
V.	Immediately under "Caller List", select the icon for **"New Item"**
W.	Choose either user or group (site-specific information)
X.	In the Domain field, select the domain that the user or group from the previous step belongs to.
Y.	In the Account field, choose either the user or group (site specific information) that will be used to access the PCAnywhere host item.
Z.	Select **OK**
AA.	Select the **Security Options** tab
BB.	In the Encryption section, in the Level field, select **PCAnywhere**
CC.	Check **"Deny lower encryption level"**
DD.	Select **OK**
EE.	Rename the host item after the name of the computer (site specific information).
FF.	Once the host item is named, double-click the host item to launch it.
GG.	Select **OK** when "The pcAnywhere host has been launched" message is displayed.
HH.	When prompted "The PCAnywhere host is now waiting for connections", select **OK**

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II.	Stop the PCAnywhere host item by double-clicking on the computer icon in the System Tray (lower-right corner of screen) and selecting cancel.
JJ.	Explore to C:\utils\PC Anywhere, execute **1051up.exe**
KK.	Select **Next** at the welcome screen.
LL.	Select **OK**
MM.	Select **Start->Shutdown** from the task bar, choose Restart
NN.	After the reboot explore to C:\Program Files\Symantec\PCAnywhere
OO.	Locate AWSES32.dll and rename it to AWSES32.old
PP.	Explore to C:\utils\PCAnywhere and copy AWSES32.dll into the C:\Program Files\Symantec\PCAnywhere folder.

Recovery on PCAnywhere install fault ("bluescreen")

In any situation where Windows 2000 blue screens after installing pcAnywhere, you should attempt to restart Windows three times before attempting to start with "Last known good configuration." The three restarts should switch pcAnywhere to Fault Tolerant boot mode. This should allow you to restart Windows, uninstall pcAnywhere, and resolve the video driver problem that caused the blue screen.

If you attempt to go to "Last known good configuration" prior to the three restarts, you will either end up doing a parallel install of NT, or you will have to reinstall NT.

10.13 _Customizing Windows Explorer Views_

1.	Open Windows Explorer.
2.	Set view to Details.
3.	From the **Tools** menu select **Folder Options.**
4.	Select the **View** tab**.**
5.	Check the **Display Compressed files and folders with alternate colors** option.
6.	Check the **Display full path in address bar** option.
7.	Check the **Display full path in title bar** option.
8.	Check the **Show hidden files and folders** option.
9.	Uncheck the **Hide extensions for known file types** option.
10.	Uncheck the **Remember each folders view settings** option.
11.	From the **Folder Views** select **"Like current folder"** to set all the views the same.
12.	Select **Yes** in the confirmation window.
13.	Select **OK** to exit the Options window.

10.14 _Disabling the Internet Connection Wizard_

1.	Double-click the **Connect to the Internet** icon on the desktop.
2.	Select Local Area Network, select **Next.**
3.	Select Local Area Network, select **Next.**
4.	Select **Next.**
5.	Select **No** to email account, select **Next.**
6.	Deselect **"Connect to the internet…".**
7.	Select **Finish.**

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10.15 Saturn Installation

1. Map a network drive to the installation source (as noted in the Prerequisites section). Verify Reconnect at Logon is unchecked.
2. In Explorer, select the mapped drive to see its contents in the right pane.
3. Select the folder Disk1 to display its contents.
4. Execute **SETUP.EXE**, found in the Disk1 folder, to begin the Saturn Installation Program. Once started, the Saturn Information System Installation window, will appear showing "Saturn Information System" , the version of the software being installed, and the copyright information for the product.
5. At the Welcome Screen, select **Next** to continue or **Cancel** to abort the setup.
6. If you choose to select Cancel to exit Setup (at any time during Setup), a dialog will appear with the message "Setup is not complete. If you quit the setup program now, the components you requested to add/remove will not be installed/uninstalled. You may run the setup program at a later time to complete the operations. Are you sure you want to quit the setup?" Select **Yes** to continue, **No** to quit setup.
7. If a message is presented that describes steps that have not been completed, note which steps have not been competed, select **OK** (the installation will abort), complete the steps as per the instructions provided and rerun the Saturn Installation.
8. When the Saturn Setup Application Type window appears, highlight Clinical or Non Clinical to choose this workstation's installation type. Select **Next** to continue or **Cancel** to abort the setup.
9. When the Enter Server Name Text window appears, enter the Server Name (site-specific information; this is the actual name of the server) and then select **Next** to continue, **Back** to return to previous page or **Cancel** to abort the setup.
10. If the Application Type selected is Clinical, the window, Saturn Setup Power Supply Selection, will appear. Select APC, MGE or other (site-specific information; one must be selected) as the UPS type for this Clinical Workstation. Select **Next** to continue or **Cancel** to abort the setup.
11. Select **Next** in the Summary window.
12. During the installation a variety of DOS windows will appear. If you want to determine what process is taking place, minimize the DOS window. A status window is displayed that will define what process is taking place.
13. When the Saturn Setup Start Copying Files window appears, select **Next** to begin copying Program Files or Cancel to abort the setup.
14. A Setup Status Screen will appear, displaying a progress bar. This bar will indicate the progress of the copy.
15. If a "Locked File Detected" message is displayed, select the **"Don't display this message again"** check box and select **Ignore**.
16. If a "Read Only File Detected" message is displayed, select the **"Don't display this message again."** check box and select **Yes**.
17. When the ODBC Data Source Administrator window appears, perform the following steps to verify the Server's ODBC settings:

    Select the **System DSN** tab.

    Select **PERIOPDM** and select the **Configure…** button.

    Select the **Login** tab

    In the User ID field enter the computer name (site-specific information; was used in section 7.2).

    In the Password field enter **ValleyBoys**

    Select the **Database** tab.

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    Verify that the Server name is set to SATURN (site-specific; this refers to the name of the ASA Database Server. By default it is set to SATURN. Some sites have different names for their Saturn DB servers and the name will need to be changed manually. Example: DUMC's is SATURNP.).

    Verify that the Database name is set to PERIOPDM

    Select the **Network** tab

    Check **TCP/IP**

    In the TCP/IP field, enter **HOST="IP address of the server"** (site-specific information)

    Select the **ODBC** tab

    Select the **Test Connection** button

    If the ODBC settings are incorrect, you will receive a "connection failed" or similar message. Repeat/verify beginning with the fourth bullet

    If the ODBC settings are correct, you will receive a "connection successful" message. Proceed to the next step

    Select the **Login** tab

    Delete the information in the User ID field and Password field.

    Select **OK**

    Select **OK**. The "*ODBC Data Source Administrator*" window will close.

18.   The Saturn Setup Complete window will appear.

19.   Select **NO** for reboot, then **Finish**.
         NOTE: If installing on a 4sys CWS, then don't reboot! Follow these steps:

     i.   Select "**Start-Run**".
     ii.   Type "**Regedit**".
     iii.   Open "Hkey_Local_Machine\Software\Nad\Serial Ports".
     iv.   Rename "Serial Port 7" to "**Serial Port 3**".
     v.   Rename "Serial Port 8" to "**Serial Port 4**".
     vi.   Set Active ports to **1,2,3,4.**
     vii.   Set Serial Ports to **1,2,3,4.**
     viii.   Close the Registry and reboot.

20.   Reboot the workstation.

21.   Following reboot, Saturn should launch.

22.   Log on as the "super user" in the Recorder application.

23.   Select **Workstation Configuration** from the **Utilities** menu.

24.   Select the **Run…** button.

25.   Enter **Taskmgr** in the edit box.

26.   Select **OK**.

27.   Select the **PERFORMANCE** tab.

28.   The CPU usage indicator should be spiking at approx. 95-100%. This indicates that "replication" is occurring. Once the CPU usage indicator drops to approx. 10-20% (after approx. 10-15 minutes), replication is complete.

29.   Go to the Saturn Recorder's Workstation Configuration Page by selecting **Workstation Configuration** from the Utilities menu.

30.   On the **General** Tab, set the **Workstation Name** to your specific site configured location.

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    31.   For NCPUs – deselect Touchscreen and verify proper video resolution (1024 X 768)

10.16 *Verify Communication with Patient Monitors (Clinical Workstations)*

    1.   Launch a new case in Recorder
    2.   In Workstation Configuration set port settings as needed (site-specific information)
    3.   Once communication with patient monitors is verified, close the case without saving it.

10.17 *Setup Printers*

    1.   Log into Saturn as the "Super User"
    2.   Select **Utilities->Workstation Configuration**
    3.   Select the **Run** button
    4.   Type "control panel" into the run field, select **OK**
    5.   Double-click on **Printers**
    6.   Double-click **Add a printer**
    7.   Select **Next** at the Welcome window
    8.   Select **Network Printer**, select **Next**
    9.   Select **Next** to browse for a printer
    10.   Locate the desired printer in the browse list and double-click on it
    11.   Consult printer information spreadsheet to determine if this printer should be set as the default
    12.   Select **Next**
    13.   Select **Finish** to close the Add Printer Wizard
    14.   Close the Printer Dialog.

10.18 *Clearing the Event Log*

    1.   Log into the Saturn Recorder application as the "Super User".
    2.   Select **Utilities->Workstation Configuration**.
    3.   Select the **Run…** button.
    4.   Type "eventvwr" into the run field, select **OK**
    5.   Select System Log.
    6.   Select **Action->Clear All Events.**
    7.   Select **No** to save the System Log before clearing.
    8.   Select Application Log.
    9.   Select **Action->Clear All Events.**
    10.   Select **No** to save the Application Log before clearing.
    11.   Select Security Log.
    12.   Select **Action->Clear All Events.**
    13.   Select **No** to save the Security Log before clearing.
    14.   Close the Event Viewer window.
    15.   Select **OK** to close the Workstation Configuration window.
    16.   Log the "Super User" out.

10.19 *Copy Time.bat (NCPUs and 3rd Party Clinicals ONLY)*

    1.   Copy ResKit and Time folders FROM a clinical TO root.

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2. Copy time.bat to root, create shortcut and rename to "time", copy shortcut to All Users\Startup and set to run minimized.

3. Copy sleep.exe to c:\nad\apps\pdm folder

4. Edit time.bat… after net time line add the following:

    "cd\;cd c:\nad\apps\pdm;sleep 5;caseeditor.exe;exit"

10.20 _Verify Correct Virtual Memory Settings On Saturn Clinical Workstations_

1. Log on to the Saturn Recorder application as the super user.

2. Select **Workstation Configuration** from the **Utilities** menu.

3. Select the **Run…** button.

4. Enter **"control panel"** in the Run edit box and select **OK**.

5. Select **System**.

6. At the System Properties window, note the amount of physical RAM in the WPU – this will be indicated toward the bottom of that window (will be approximately one of the following – 64, 128 or 256.)

7. Select the **Advanced** tab.

8. Select the **Performance options** button.

9. Verify that the virtual memory setting is 512 Mb.

10. If the virtual memory setting is correct, select **OK** in the Performance Options window, select **OK** in the System Properties window, close the Control Panel window and go to the next section.

11. If the virtual memory setting is not correct, select the **Change** button – a virtual memory window will appear.

12. Under **Drive**, select the **C:** drive.

13. Under the **Paging File size For Selected Drive** section, change the **Initial Size** field to 512 MB and the **Maximum Size** field to 768 MB.

14. Select the **Set** button.

15. Select **OK** to the Virtual Memory window.

16. Select **OK** at the System Properties window.

17. Proceed with the remainder of the Saturn Workstation Installation Procedures.

10.21 _CCOW Setup (Only if a site is to have CCOW enabled – site specific information)_

1. A) Clinical:

    a. Open **Task Manager** and choose the **Processes** tab

    b. Choose **System One** and select **End Process** - the System One and Proto applications will close.

    c. Locate **NADREP~1.EXE** (replication agent) in the list and select **End Process**

    d. A **Task Manager Warning window** will appear, select **YES**

    e. Choose the **Applications** tab

    f. Choose **Saturn - Recorder** and select **End Task** – when prompted to end the task select **End Task**.

    g. Choose **Proto** and select **End Task** – when prompted to end the task select **End Task**.

    h. Close Task Manager

    B) Nonclinical:

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    a.   Close Recorder by choosing File\Exit in Saturn.

    b.   Verify that NADREP~1.EXE is stopped

    c.   Open **Task Manager** and choose the **Processes** tab

    d.   Locate **NADREP~1.EXE** (replication agent) in the list and select **End Process**. If it is not in the list, it is not running. Skip to step f below.

    e.   A **Task Manager Warning window** will appear, select **YES**

    f.   Close Task Manager

2.   Map a network drive to the installation source (as noted in the Prerequisites section). Verify Reconnect at Logon is checked.

3.   Execute **SETUP.EXE**

4.   If you receive a prompt stating an update for JavaVM is necessary:

    a.   Answer **YES**

    b.   Once the update is complete, reboot the workstation. Clinicals – keep Saturn from launching following reboot by holding down the shift key at NT startup. Will need to enter the appropriate user password (site-specific information) to logon.

    c.   The installation will automatically resume.

5.   Accept all defaults to licensing and path prompts

6.   When prompted for the Virtual IP or Network Name of the Sentillion Network Appliance, enter the appropriate values (site-specific information).

7.   Installation will complete

8.   Disconnect the mapped network drive

9.   Reboot the workstation

10.   Clinical - allow Saturn to launch. Nonclinical – launch Saturn

11.   Update Context Rules (note: this step may not be required. Consult with Context Manager.)

    a.   Request the hospital's Context Manager to remove the Subject rules or provide a work-around to the rules for the computer name that has been upgraded. Continue after the configuration change has been completed.

       i.   Saturn supports the Patient Subject only.

      ii.   The site may apply rules to their Context Management system that requires other Subject setting prior to Patient Subject setting. These rules must be removed or the hospital must provide a work-around per workstation prior to enabling Clinical context in Saturn.

12.   Execute the List Manager application, select **System Configuration** from the Utilities menu, enter the site specific **CCOW Application Key Name** and select **OK**.

13.   Execute the following items for each workstation that will be running CCOW:

    Select **Workstation Configuration** from the Utilities menu in the Recorder application

    Check the **CCOW Enabled** checkbox

    Check the **Join Context at Startup** checkbox

    Reboot the workstation

*** SATURN WORKSTATION INSTALLATION COMPLETE***

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11   WINDOWS 2000

11.1 *Executing Third Party Applications on a Clinical Workstation*

Access to the desktop on a clinical workstation running Windows 2000 is limited. In order for Saturn Service personnel to execute third party applications on the workstation, a mechanism has been provided in the Recorder application as follows:

1. Log on as the "super user" in the Recorder application.

2. Select **Workstation Configuration** from the **Utilities** menu.

3. Select the **Run…** button.

4. Enter the name of a third party application to execute and select **OK**.

11.2 *Preparation for Uninstall of Saturn on a Clinical Workstation*

The following steps must be executed prior to uninstalling Saturn on a clinical workstation running Windows 2000:

1. Log on as the "super user" in the Recorder application.

2. Select **Workstation Configuration** from the **Utilities** menu.

3. Select the **Run…** button.

4. Type **poledit** in the Open text box and select **OK**.

5. Select **Open Registry** from the **File** menu in the System Policy Editor application.

6. Select the **Local User**.

7. Expand all items and uncheck all items except for the following:

   Windows NT Shell | Custom folders | Custom Programs folder,

   Windows NT Shell | Custom folders | Custom desktop icons,

   Windows NT Shell | Custom folders | Custom Startup folder,

   Windows NT Shell | Custom folders | Custom Network Neighborhood,

   Windows NT Shell | Custom folders | Custom Start menu,

   Windows NT System | Parse Autoexec.bat.

8. Select **OK** and close the window.

9. Reboot the system.

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12 WINDOWS 2000 WORKSTATION TEST PROCEDURE

12.1 *Document General Workstation Information*

(*The **Results Sheet** is located at the end of this chapter as well as in Section 10.*)

NOTE: To execute third party applications on a clinical workstation, see the section of the same name.

1. Record **Hospital Name**, **Address** and **Install Date** on the Results Sheet.

2. Record **Location** of the WPU on the Results Sheet.

3. Record the anesthesia machine to which Saturn is mounted, as **Mount** on the Results Sheet.

4. Record the type of **UPS** the WPU is connected to on the Results Sheet.

5. Record the type of workstation as **C** for clinical or **NC** for non-clinical on the Results Sheet.

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6.   For clinicals, record the **Type** of clinical as **WPU** for Dräger WPUs, **4sys CWS** for the EG unit, **HPU** for other 3rd party clinicals, or **AOU** for Advantech All-in-One unit on Results Sheet.

7.   Record the WPU S**erial Number** and **Part Number** on the Results Sheet.

8.   Record **Domain Username** and **Password** on the Results sheet.

9.   Record **Local Administrator Username** and **Password** on the Results sheet.

10. Execute **Window Explorer**, explore to **cmd.exe** in the system directory and execute. (Enter **explorer** via the **Run…** button in Recorder on a clinical workstation.)

11. At the command prompt type **cd ** and press the **Enter** key.

12. At the command prompt type **ipconfig /all** and press the **Enter** key. The IPConfig window will appear.

13. Record the following information on the Results Sheet:

Host Name as **Computer Name**
Physical Address as **NIC Address**
IP Address
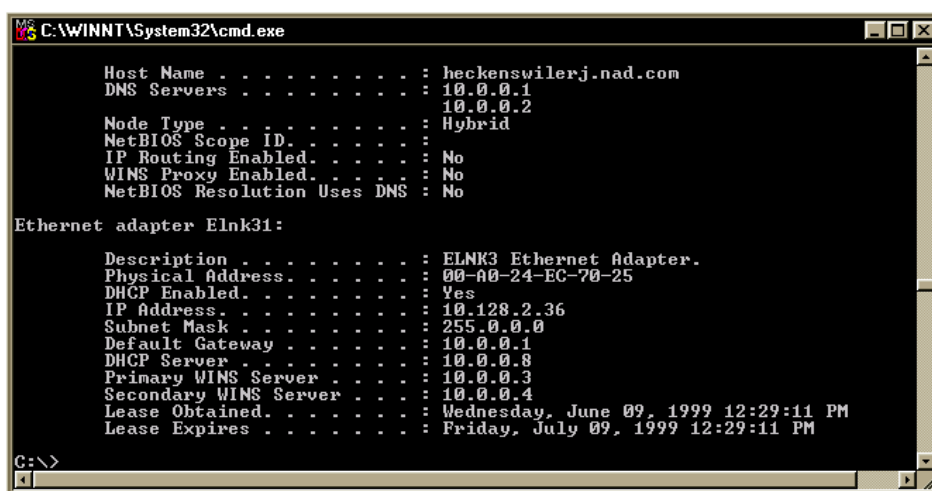**Subnet Mask**
Default Gateway

Figure 4 Workstation Command Window

14. Close the Command window.

15. Through **Explorer**, right click on **My Computer** and choose **Properties.** Choose the **Network Identification** tab.

16. Record the **Domain** on the Results form.

17. Choose the **General** tab. Record the **Microsoft Windows** Version and service pack level under **System** as **Windows Version** on the Results sheet.

18. Click **Cancel** on the System Properties dialog.

19. Close Windows Explorer.

20. Execute **Sybase Central** (enter **scview** via the **Run…** button in Recorder on a clinical workstation).

21. Select **Plug-ins**… from the **Tools** menu.

22. Select the **Change…** button and check the **Adaptive Server Anywhere** checkbox.

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23.	Select the **OK** button.
24.	Select **About Sybase Central** from the **Help** menu.
25.	Record the Adaptive Server Anywhere Plug-in version as the **Sybase Version** on Res. Sheet.
26.	Click the **OK** button to close the About Sybase Central dialog.
27.	Click the **Tools** file menu and select **Connect**. The Connect to Adaptive Server Anywhere dialog will appear.
28.	Enter the appropriate User ID and Password.
29.	Click **OK**. The Connect to Adaptive Server Anywhere dialog will close and the Sybase Central window will appear.
30.	Record the name displayed under *Utilities* as the **Server Database Name** on the Results Sheet.
31.	Close the Sybase Central window.
32.	Execute **Control Panel** (enter **Control Panel** via the **Run…** button in recorder on a clinical workstation) and select the **Printers**.
33.	Record the name of each installed printer on the Results Sheet.
34.	Right-click the printer icon and choose **Properties**. Record the **Driver** installed for that printer from the **Advanced** tab.
35.	Choose the **Ports** tab and record the port used. If Standard TCP/IP printing is utilized, record the IP address of the printer as well. (Repeat steps 31 and 32 for each installed printer)
36.	Restart the computer.

12.2 Testing the Saturn System

1.	Does the System autolog onto Windows 2000? Record the results on the Results Sheet.
2.	Does the System One diagnostic screen appear?
3.	Verify the **System One CRC checks** complete and record the results on the Results Sheet.
4.	Are the **Version labels** displayed on the diagnostics screen correct? Record the results on the Results Sheet.
5.	Record the **PDM Application** version as **Saturn Version** of the Results Sheet.
6.	Does the SYSTEM FUNCTIONAL message appear on the System One diagnostic screen? Record the results on the Results Sheet.
7.	The Saturn main logon screen should appear, Enter **NAD** in the username box and click **OK**.
8.	Is the **Saturn logon successful**? Record the results on the Results Sheet.
9.	Click on the **Logout** button in the menu at the top of the screen, the Saturn main logon screen should appear.

(*Steps 10 through 12 should be performed from one nonclinical or clinical workstation only*)

10.	At the Saturn main logon screen, enter **NAD** in the username box and click **OK**.
11.	Select the **Utilities** file menu and choose **List Manager**, the List Manager window will appear.
12.	Click the + next to **Drugs** and select **Induction** in the left pane.
13.	De-select the check box next to the drug **thiopental** from the right pane.
14.	Select **File** from the file menu and chose **Exit** to close List Manager, save your changes.
15.	Click on the **Logout** button in the menu at the top of the screen, the Saturn main logon screen should appear.

(*Steps 16 through 24 should be performed from all WPU's and nonclinical workstations*)

16.	At the Saturn main logon screen, enter **NAD** in the username box and click **OK**.

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17. At the main Saturn window, select **File**, then select **New Case**.
18. Click the **Add Drug** button at the top of the screen, the Add Drug dialog will appear.
19. Click the **Induction** tab of the Add Drug dialog, verify **thiopental** is not listed and click **OK**.
20. If the above is true - **List Manager is functional**, record the results on the Results Sheet.
21. Click the **Cancel** button in the Add Drug dialog box.
22. Click on the **Close Case** button in the menu at the top of the screen.
23. A dialog box will appear asking if you want to save the case - select **NO**.
24. Click on the **Logout** button in the menu at the top of the screen, the Saturn main logon screen should appear.

12.3 Modifying Drug Entries
(*Perform this step from one WPU or nonclinical workstation only*)
1. At the Saturn main logon screen, enter **NAD** in the username box and click **OK.**
2. Select the **Utilities** file menu and choose **List Manager**, the List Manager window will appear.
3. Click the + next **Drugs** and select **Induction** in the left pane.
4. Select the check box next to the drug **thiopental** from the right pane.
5. Select **File** from the file menu and choose **Exit** to close List Manager, save your changes.

12.4 Replication Verification
1. Double-click on the **NADRepAgent** icon in the system tray within the taskbar.

Figure 5 NADRepAgent Icon

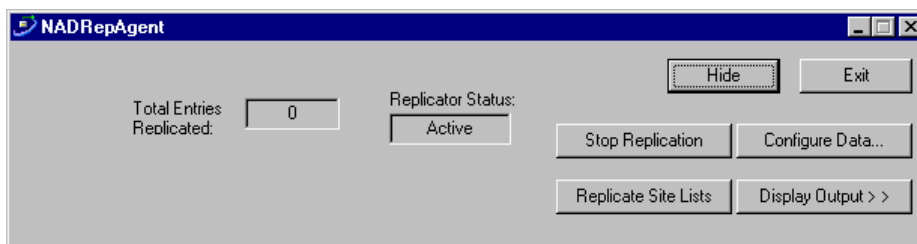2. Verify that the Replicator Status is Active.

Figure 6 NADRepAgent Dialog

3. Click **Hide** to close the dialog.
4. **NADRepAgent is functional** – Record the results on the Results Sheet.

12.5 PCAnyWhere Verification
1. Execute **PCAnywhere** (enter **awhost32.exe** via the **Run…** button in Recorder on a clinical workstation).
2. Click the **Hosts** button to view all host items.
3. Double-click the host icon with the workstation name to start the PCAnywhere Host service.
4. If the **Host Service is functional**, record the results on the Results Sheet.
5. Record **PCAnywhere Username** and **Password** on the Results Sheet.

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6. Record the version of PCAnywhere installed and type of installation as **H** for Host Only or **HR** for Host and Remote on the Results Sheet.

7. Restart the computer.

12.6   _Recording Installed Modules and Applications_

NOTE: The following steps should be performed from one workstation only

1. Execute **Sybase Central** (enter **scview** via the **Run…** button in Recorder on a clinical workstation).

2. Click the **Tools** file menu and select **Connect**. The Connect to Adaptive Server Anywhere dialog will appear.

3. Enter the appropriate User ID and Password.

4. Click **OK**.   The Connect to Adaptive Server Anywhere dialog will close and the Sybase Central window will appear with a connection to the server database.

5. Click on the **+** symbol next to the server database name to expand the list.

6. Right-click on **periopdm (NAD)** and choose **Open Interactive SQL** from the context menu. An Interactive SQL window will appear.

7. Type the following select statement in the **Command window**, which is in the bottom half of the Interactive SQL window. Highlight all text and click the **Execute** button.

    SELECT WorkstationName_str, InstalledModules_wrd FROM LocalConfiguration; OUTPUT TO c:\WkstnCfg.dat FORMAT TEXT

8. The filename and drive may be changed to accommodate the configuration of the workstation from which you are working.

9. Confirm the file was created in the directory you specified. If the file exists, close all Sybase windows.

10. Open the WkstnCfg.dat file in Notepad and print the file.

11. Close and delete the file. Attach the printout to the Results Sheets.

12.7   _Loopback Test - AOPUs_

NOTE: Saturn System and Proto must be closed. See "Preparation for Uninstall of Saturn" section for instructions on closing the applications.

1. Log in as local administrator on a clinical workstation.

2. On the back of the workstation, connect a serial cable to COM 5 and COM 6.

3. On the back of the workstation, connect a serial cable to COM 7 and COM 8.

4. Execute **Explorer** (enter **Explorer** via the **Run…** button in Recorder on a clinical workstation).

5. Find the **loop.exe** file and execute it.

6. A DOS window should appear containing the following text:

characters, rxb_buffer=0 STRING IS SENT FROM COM 5 TO COM 6

characters, rxa_buffer=1 NOW, SENT FROM COM 5 TO COM 6

characters, rxb_buffer=0 STRING IS SENT FROM COM 7 TO COM 8

characters, rxa_buffer=1 NOW, SENT FROM COM 7 TO COM 8

This text will repeat itself.

7. If the above occurs, the **Loopback Test** is successful, record the results on the Results Sheet.

8. Close the DOS window by clicking on the X in the upper right hand corner of the window.

9. Log on as the local user (e.g., "wpuser" - site specific information), and restart and verify auto log on on a clinical workstation. (**End of test instructions.**)

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12.8 *WORKSTATION RESULTS SHEET*

Sales Order Number:_____

Hospital Name:_____ Install Date:_____

Street Address:_____

City:_____ State:_____ Zip:_____

WPU Serial Number:_____ WPU Part Number:_____

WPU NIC Address:_____ IP Address:_____

Computer Name:_____ Subnet Mask:_____

Domain:_____ Gateway:_____

Domain Username:_____ Server Database Name:_____

Domain Password:_____ DB User ID:_____

Local Admin Username:_____ Flat Panel Serial Number:_____

Local Admin Password:_____ Location:_____ PCA Type:_____

PCAnywhere Username:_____ Mount:_____ UPS:_____

PCAnywhere Password:_____ C/NC:_____ Type:_____

VERSION INFORMATION:

Windows:_____ Sybase:_____ Saturn:_____ PCAnywhere:_____

VERIFICATIONS:

Autolog verification Loopback Test
System One CRC checks List Manager is functional
Version Labels are correct NADRepAgent is functional
Saturn logon is successful Saturn Recorder is functional
System One functional confirmation PCAnyWhere Host Service is functional

All Verifications Passed Successfully Initials _____

INSTALLED MODULES AND APPLICATIONS:

APPLICATIONS (Recorder = 1, List Mgr = 2, Env Mgr = 4, Case Mgr = 8, Report Mgr = 16, All = 31): _____

MODULES (Pre-Op = 1, Intra-Op = 2, Post-Op = 4, Browse = 8, All = 15): _____

PRINTERS: (Record each installed printer's name, path, IP address and driver; Specify if LPR printing is utilized)

_____

_____

_____

NOTES:

_____

_____

Signature:_____ Date:_____

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